

CLAIMS

1. A fuel supply system for a vehicle having an engine, the system comprising:

a fuel tank for containing fuel;

a fuel delivery module having a reservoir and a fuel pump pressurizing fuel from the reservoir;

a fuel supply line leading from the fuel tank to the engine;

a jet pump for collecting fuel from the bottom of the fuel tank and supply the collected fuel to the reservoir;

a filter having a housing enclosing a filter media, the filter including an inlet for receiving fuel from the fuel pump, the filter including a first outlet supplying filtered fuel to the fuel supply line, the filter including a second outlet supplying filtered fuel to the jet pump.

2. The system of claim 1, wherein the second outlet includes a standpipe having a receiving end positioned within the top half of the filter housing.

3. The system of claim 2, wherein the receiving end is positioned adjacent the top of the filter housing.

4. The system of claim 2, wherein the filter housing includes an upper wall and a lower wall, and wherein the receiving end is positioned adjacent the upper wall.

5. The system of claim 2, wherein the filter housing includes an inner wall and an outer wall joined by an upper wall and a lower wall, and wherein one of the inner and outer walls includes a recessed channel receiving at least a portion of the standpipe.

6. The system of claim 1, wherein the first outlet includes a standpipe having a receiving end positioned within the bottom half of the filter housing.

7. The system of claim 6, wherein the receiving end is positioned adjacent the bottom of the filter housing.

8. The system of claim 6, wherein the filter housing includes an upper wall and a lower wall, and wherein the receiving end is positioned adjacent the lower wall.

9. The system of claim 1, wherein the filter housing is ring-shaped and circumscribes a portion of the fuel delivery module.

10. The system of claim 9, wherein the filter housing includes deflectable locking tabs for engaging the fuel delivery module.

11. The system of claim 9, wherein the jet pump includes a nozzle connected to the second outlet, the nozzle positioned below the filter and radially inside the ring-shape.

12. The system of claim 1, wherein the fuel delivery module and fuel filter are located within the fuel tank.

13. An in-tank fuel filter for filtering fuel between a fuel pump and a fuel supply line leading to the engine, the filter comprising:

a housing having an upper wall and a lower wall;

a filter media enclosed within the housing;

an inlet for receiving fuel from the fuel pump;

a first outlet fluidically connected to the fuel supply line; and

a second outlet fluidically connected to a jet pump defined by a nozzle, the second outlet receiving fuel from adjacent the upper wall of the housing.

14. The filter of claim 13, wherein the second outlet includes a standpipe having a receiving end positioned proximate the upper wall of the housing.

15. The filter of claim 13, wherein the first outlet receives fuel from adjacent the lower wall of the housing.

16. The filter of claim 15, wherein the first outlet includes a standpipe having a receiving end positioned proximate the lower wall of the housing.

17. An in-tank fuel filter for filtering fuel between a fuel pump and a fuel supply line leading to the engine, the filter comprising:

a housing having an upper wall and a lower wall;

a filter media enclosed within the housing;

an inlet for receiving fuel from the fuel pump;

a first outlet including a first standpipe fluidically connected to the fuel supply line;

a second outlet including a second standpipe extending inside the housing; and

a jet pump integrally formed with the filter, the jet pump defined by a nozzle fluidically connected to the second standpipe.

18. The filter of claim 17, wherein the second standpipe has a receiving end positioned proximate the upper wall of the housing.

19. The filter of claim 17, wherein the first standpipe has a receiving end positioned proximate the lower wall of the housing.

20. The filter of claim 17, wherein the filter housing is ring-shaped and the nozzle is positioned below the lower wall and radially inside the ring-shape.